



Digital health R&I priorities (Government of South Korea)

- Innovating bio-health industry through new technologies (Data, Network and AI)
 - To foster the bio-health industry, companies will focus on supporting next-generation promising technologies such as innovative new drugs, medical devices, and regenerative medicine. It is significantly based on DNA (Data, Network and AI)
- Strengthening public-interest R&D investment
 - National health promotion R&D is carried out to reduce medical expenses and preventative health care, such as rehabilitation and care services for the medical vulnerable, chronic diseases, and development of service models for health care
- Creating a hospital-based research ecosystem
 - The government will focus on fostering hospitals as a hub for innovation in the research ecosystem, including the establishment of a hospital-oriented joint research platform that can be utilized by industries, universities, research institutes, and hospitals.
- Supporting localization of materials, parts, and equipment
 - Self-development of vaccines highly dependent on foreign countries, strengthening support for localization, including basic materials for imported-dependent cosmetics and assistive devices for the elderly and the disabled



Main challenges related to digital health

- Facilitate certification procedures and regulations to industrialize innovation
- Access to a bigger market to produce various pilot projects
- Go beyond research at the level of industrial linkage



Specific challenges for the ageing population

- Prevent dementia through preventive measures and the development of a drug
- Reduce social gap in health technologies acceptance and use
- Realign the technology policies in R&D sector to be more focused on prevention and on mental health issues



Relevant key programmes and funding agencies



Government of South Korea (Ministry of Science and ICT, Ministry of Trade, Industry and Energy, Ministry of Health and Welfare)

and agencies (Korea Health Industry Promotion Agency, Centres for Disease Control and Prevention, etc.)



Most important players and networks in the field



The digital healthcare ecosystem consists of government institutions, regulatory bodies, industry associations, medical centres, large corporations, blockchain-based healthcare service providers and a few notable start-ups and scale-ups.

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- Familiarity with digital technologies
- Eagerness for leadership in the digital healthcare market compared to the same generation in other countries
- Growth of the South Korean government's R&D investments related to digital health projects

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- Difficulties in commercialisation of technology: small market
- Personalised management
- The social security system is vulnerable
- There is a large gap in income, education, and health status, and a great diversity of life patterns among the elderly

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- The elderly population is growing at a rapid rate
- Global commercialisation, international cooperation
- Increase interest for life-cycle healthcare through digital health

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- Various policies and welfare projects for the elderly are on the rise, but concrete measures and strategies to keep them financially stable are lacking
- Complex standardisation procedures



Internationalisation S&I collaborations in Health between EU & strategic partner countries

- Cooperation between the EU and South Korea on R&I is governed by the Agreement for S&T Cooperation which came into force in 2007. Despite that, some practical issues in R&I cooperation are still to be improved. In 2017, both the EU and Korea emphasised the need to deepen, scale up and open opportunities for cooperation in selected technological areas such as ICT, nanosafety, nanoelectronics, health/bio (infectious diseases, rare diseases, and antimicrobial resistance).



Good practices and outlook for further international collaboration

- South Korea is a great place to conduct pilot projects for AHA related technologies as the elderly population is large and the governmental support is high. There is a demand for the development and global commercialisation of holistic care services with innovative technologies and cooperation. An 'AHA platform' shall be built all together to solve social problems caused by a super-ageing society soon.
- Mental, psychological and wellness related R&D are also considered to be interesting topics for collaboration, since EU is advanced in these topics.

Key sources

More information can be found in the complete report D1.2 - Panorama of the digital health landscape in the EU and in the Strategic Partner Countries

https://www.nid.or.kr/info/ub_2019.aspx?no=47995

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